

We claim:

1 1. A transmission electron microscope comprising:
2 a housing;

3 an electron beam generator on said housing directing an
4 electron beam along a transmission electron microscopy path
5 within said housing;

6 a luminescent screen in said housing transverse to said
7 path and insertable in said path for transforming an electron
8 image into a photon image;

9 an optical element juxtaposed with said luminescent
10 screen for rerouting said photon image through a right angle;

11 a camera outside said housing in optical alignment with
12 said optical element for registering said photon image;

13 a focussing lens optics spaced from said optical
14 element and said camera and in optical alignment with said
15 optical element and said camera; and

16 a structure fixing said luminescent screen, said
17 optical element, said camera and said focussing lens optics
18 together for joint movement relative to said path.

1 2. The transmission electron microscope defined in
2 claim 1 wherein said optical element is a prism.

1 3. The transmission electron microscope defined in
2 claim 2 wherein said camera is a high resolution CCD camera.

1 4. The transmission electron microscope defined in
2 claim 3 wherein said structure forms a pneumatically actuated
3 slide.

1 5. The transmission electron microscope defined in
2 claim 4 wherein said structure comprises at least two rods
3 extending through a wall of said housing, said wall being formed
4 with a vacuum window, said focusing lens optics including lenses
5 on opposite sides of said window.

1 6. The transmission electron microscope defined in
2 claim 1 wherein said camera is a high resolution CCD camera.

1 7. The transmission electron microscope defined in
2 claim 1 wherein said structure forms a pneumatically actuated
3 slide.

1 8. The transmission electron microscope defined in
2 claim 1 wherein said structure comprises at least two rods
3 extending through a wall of said housing, said wall being formed
4 with a vacuum window, said focusing lens optics including lenses
5 on opposite sides of said window.

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